

Figure 1
Interleukin-21

1 GGCACGAGTGGACACGGATGAGGACCGCTATCCACAGAACGCTGGCCTCGCCGAGTGCCT 60
1 A R V D T D E D R Y P Q K L A F A E C L 20
Domain I Domain II

61 GTGCAGAGGCTGTATCGATGCACGGACGGGCCGAGACAGCTGCGCTCAACTCCGTGCG 120
21 C R G C I D A R T G R E T A A L N S V R 40
Domain II

121 GCTGCTCCAGAGCCTGCTGGTGTGCGCCGCCGCTGCTCCCGGACGGCTGGCTGGGCT 180
41 L L Q S L L V L R R R P C S R D G S G L 60
Domain III

181 CCCCACACCTGGGCCTTGCCCTCCACACCGAGTTCACTCACGTCCCCGTGGCTGCAC 240
61 P T P G A F A F H T E F I H V P V G C T 80
Domain IV

241 CTGCGTGCTGCCCCGTCAGTGTGACCCCAAGGCCGTGGGCCCTTAGACTGGACACGT 300
81 C V L P R S V 87
Domain IV

301 GTGCTCCCCAGAGGCACCCCTATTTATGTTGTTATTTATGTTATTTATGCTCCCCC 360

361 AACACTACCCCTGGGTCTGGCATTCCCCGTGTGGAGGACAGCCCCCACTGTTCTC 420

421 CTCATCTCCAGCCTCAGTAGTTGGGGTWAAGGAGCTCAGCACCTCTCCAGCCCTAA 480

481 AGCTGCAGAAAAGGTGTACACGGCTGCCCTGTACCTTGGYTOCCCTGTCCTGCTCCCCGT 540

541 TCCCTTACCCCTATCACTGGCTCAGGCCCCCGCAGGCTGCCCTTCCCAACCTCTTGG 600

601 AGTACCCCTGTTCTAAACAATTATTTAAGTGTACGTGTATTAAACTGATGAACAC 660

661 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 705

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Figure 2A
Interleukin-22

1	GGAATTGGCACCGAGCTCGTCCGTGCTCAGTGCCTTCCACCAACACGCTGCAGCTGGGC	60
1	N S A R A R A V L S A F H H T L Q L G P	20
#		
61	CGCGTGAGCAGGCCGCAACCGAGCTGCCCGCAGGGGGCAGGCCGCGACCGCCG	120
21	R E Q A R N A S C P A G G R P A D R R F	40
#		
121	TCCGGCCGCCACCAACCTGCCAGCGTGTGCCCTGGGCCTACAGAATCTCCCTACGACC	180
41	R P P T N L R S V S P W A Y R I S Y D P	60
Domain I		
181	CGGCGAGGTACCCAGGTACCTGCCCTGAACGCTACTGCCCTGTGCCCTGGGCTGCCCTGACCG	240
61	<u>A R Y P R Y L P E A Y C L C R G C L T G</u>	80
Domain I Domain II		
241	GGCTGTTGGCGAGGAGGACGTGCGCTTCCGAGCGCCCTGCTACATGCCAACCGTCG	300
81	L F G E E D V R F R S A P V Y M P T V V	100
Domain III		
301	TCCTGCGCOGCACCCCCGCTGCGCCGGCGGCTTCCGTCTACACCGAGGCCTACGTCA	360
101	<u>L R R T P A C A G G R S V Y T E A Y V T</u>	120
Domain III		
361	CCATCCCCGTGGCTGCACCTGCGTCCCCGAGCGGAGAAGGACGCAGACAGCATCACT	420
121	<u>I P V G C T C V P E P E K D A D S I N S</u>	140
Domain IV		
421	CCAGCATCGACAAACAGGGGCCAACGCTCTGCCCTGGGCCCAACGACGGGCCGCTGGCC	480
141	S I D K Q G A K L L L G P N D A P A G P	160
#		
481	CCTGAGGCCGGTCTGCCCGGGAGGTCTCCCGGCCATCCGAGGCCAACGCTG	540
541	GAGCCGCCTGGAGGGCTGGTGGCGACCTCTGAAGAGAGTCACCGAGCAAACCAAGTG	600
601	CCGGAGCACCAGGCCGCCCTTCCATGGAGACTCGTAAGCAGCTTCATCTGACACGGCA	660
661	TCCCTGGCTTGCTTTAGCTACAAGCAAGCAGCGTGGCTGGAAAGCTGATGGAAACGACC	720
721	CGGCACGGGCATCCTGTGCGGCCGCATGGAGGGTTGGAAAAGTTACGGAGGCCTCC	780
781	CTGAGGGAGCCTCTCAGATCGGCTGCTGCGGGTGCAGGGCGTGAECTACCGCTGGGTGCTT	840
841	GCCAAAGAGATAGGGACGCATAIGCTTTAAAGCAATCTAAAAATAATAAGTATAG	900

Figure 2B
Interleukin-22

901 CGACTATATACCTACTTTAAAATCAACTGTTTGAATAGAGGCAGAGCTATTTATATT 960
961 ATCAAATGAGAGCTACTCTGTTACATTTCTAACATATAAACATCGTTTTACTTCCTTC 1020
1021 TGGTAGAAATTTTAAAGCATAATTGGAATCCCTGGATAAATTTGTAGCTGGTACACTC 1080
1081 TGGCCTGGGTCTCTGAATTAGCCTGTCACCGATGGCTGACTGATGAAATGGACACGTCT 1140
1141 CATCTGACCCACTCTCCCTTCACTGAAGGTCTCACGGGCCTCCAGGTGGACCAAAGGG 1200
1201 ATGCACAGGCGGCTCGCATGCCCAAGGGCAGCTAAGAGTTCCAAAGATCTCAGATTGG 1260
1261 TTTTAGTCATGAATACATAAACAGTCTCAAACCTCGCACAAATTTTCCCTTTGAAAG 1320
1321 CCACTGGGCCAATTGTGGTAAGAGGTGGTGGATAAGAAGTGGAACGTGACATCTT 1380
1381 GCCAGTTGTCAGAAGAATCCAAGCAGGTATTGGCTTAGTTGTAAGGGCTTCTAGGATCAGG 1440
1441 CTGAATATGAGGACAAAGTGGCCACGTTAGCATCTGCAGAGATCAATCTGGAGGCTCT 1500
1501 GTTTCTGCATTCTGCCACGAGAGCTAGGTCTTGTCTTCTTCTTGTGAAAGTCTGT 1560
1561 CTCTGAACACAATTATTGTAAAAGTTAGTAGTTCTTTTAAATCATTAAAAGAGGCTT 1620
1621 GCTGAAAAAAAAAAAAAAA 1642

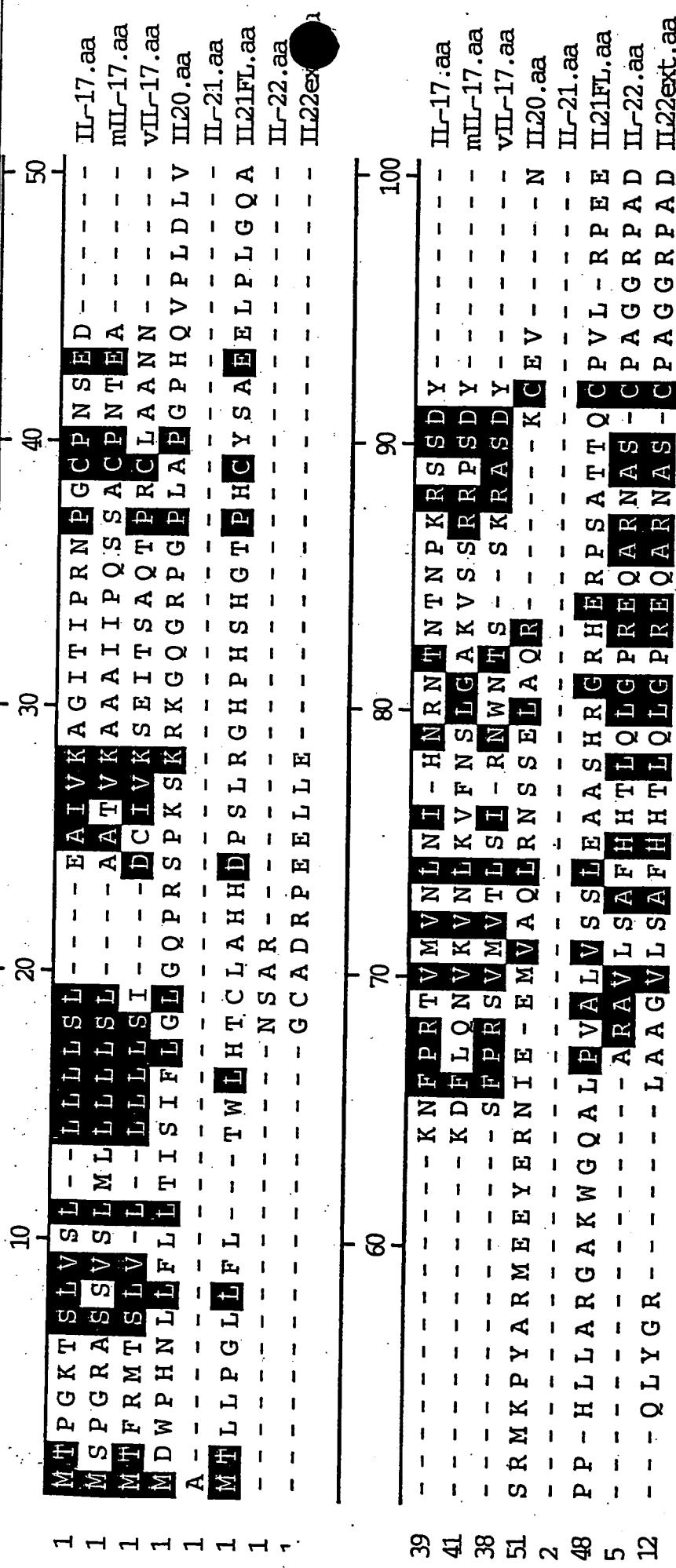


Figure 3A

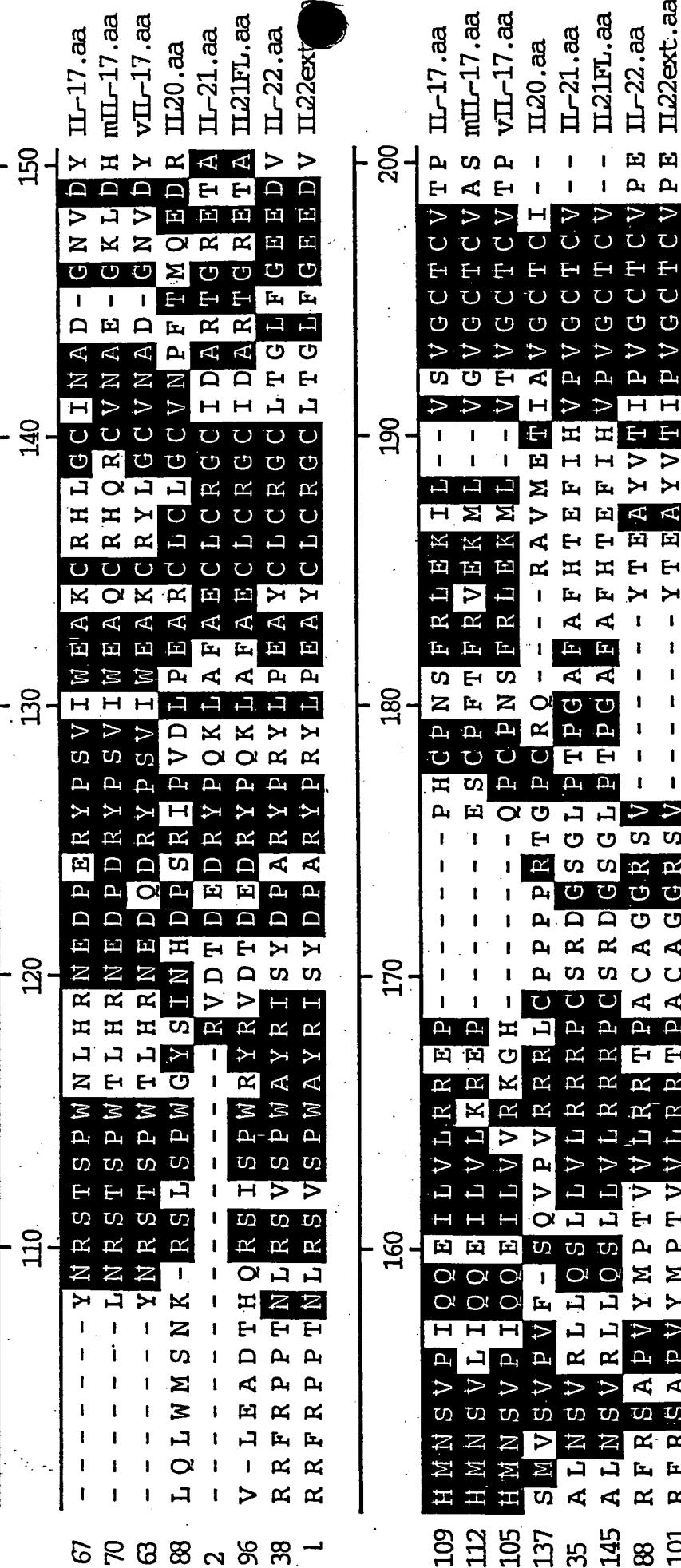


Figure 3B

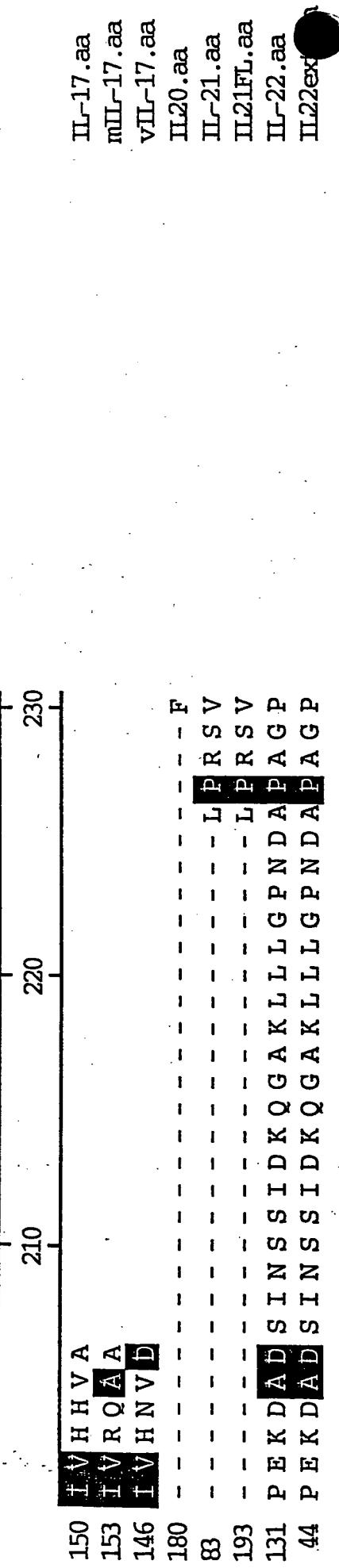


Figure 3C

Figure 4
Interleukin-21 Polypeptide Analysis

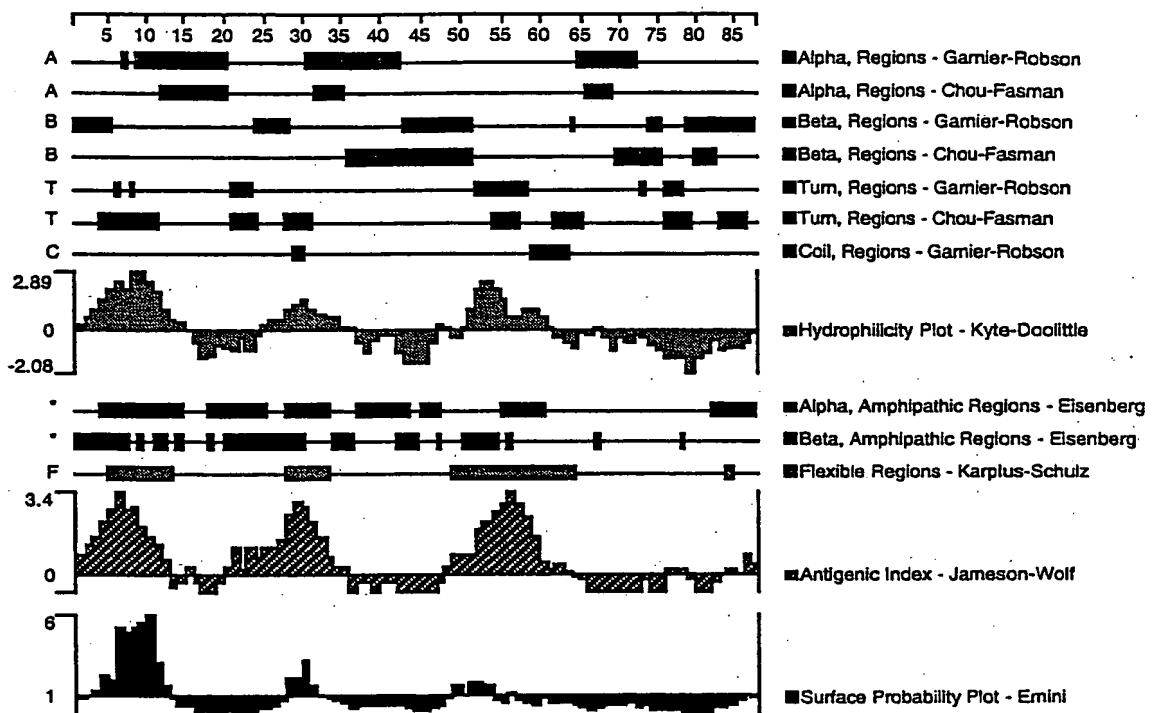
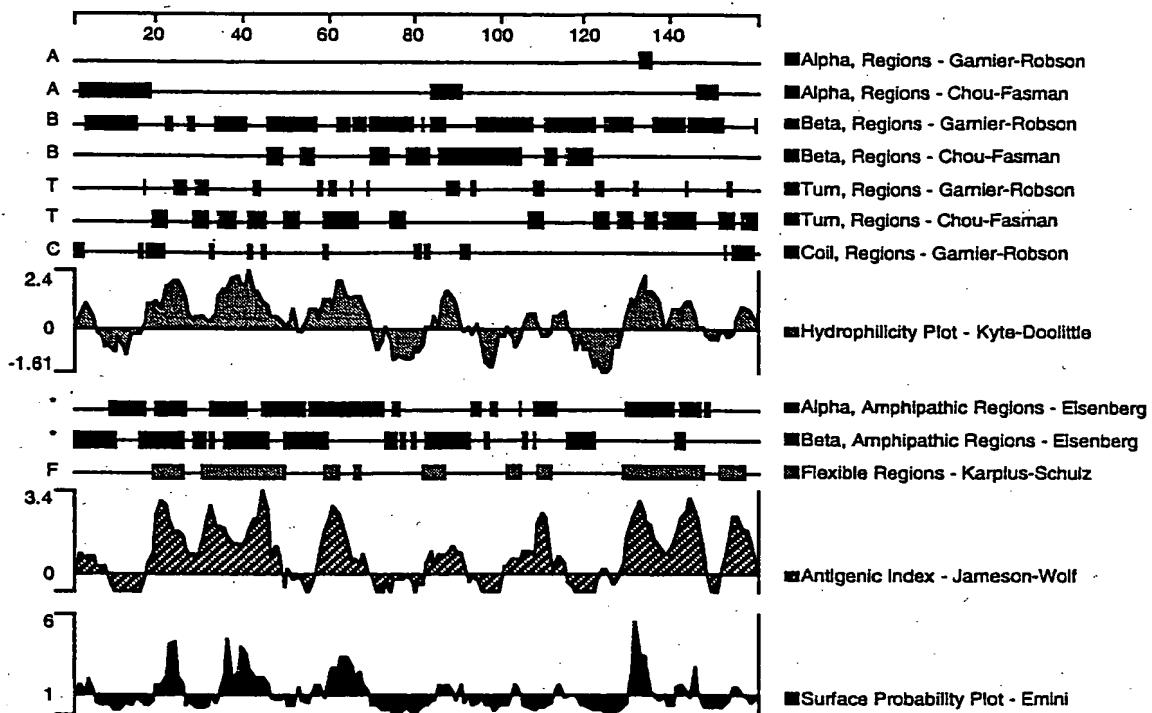


Figure 5
Interleukin-22 Polypeptide Analysis



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Figure 6A
Interleukin-21

1	GCTCCAAGCCCAGCCTGCCCGCTGCCGCCACCATGACGCTCCCTCCCGGCCCTCTGTTT	60
1	<u>M T L L P G L L F</u>	9
61	CTGACCTGGCTGCACACATGCCTGGCCCACCATGACCCCTCCCTCAGGGGGCACCCCCAC	120
10	<u>L T W L H T C L A H H D P S L R G H P H</u>	29
121	AGTCACGGTACCCACACTGCTACTCGGCTGAGGAACGTCCCCCTGGCCAGGCCCCCA	180
30	<u>S H G T P H C Y S A E E L P L G Q A P P</u>	49
Domain V		
181	CACCTGGCTGGCTGAGGTGCCAAGTGGGGCAGGCCCTTGCTGAGCCCTGGTGCCAGC	240
50	<u>H L L A R G A K W G Q A L P V A L V S S</u>	69
Domain VI		
241	CTGGAGGCAGCAAGCCACAGGGGAGGCACGGAGAGGCCCTCAGCTACGACCCAGTGCCG	300
70	<u>L E A A S H R G R H E R P S A T T Q C P</u>	89
301	GTCCTGGGCCGGAGGAGGTGGAGGCAGACACCCACCAGCGCTCCATCTCACCCCTGG	360
90	<u>V L R P E E V L E A D T H Q R S I S P W</u>	109
Domain VII		
361	AGATAACGGGTGGACACGGATGAGGACCGCTATCCACAGAACGCTGGCTTCGCCAGTGC	420
110	<u>R Y R V D T D E D R Y P Q K L A F A E C</u>	129
Domain I		
Domain II		
421	CTGTGCAGAGGCTGTATCGATGCACGGACGGCCGGAGACAGCTGGCTCAACTCCGTG	480
130	<u>L C R G C I D A R T G R E T A A L N S V</u>	149
Domain II		
481	CGGCTGGCTCCAGAGCCTGGCTGGCTGCCGCCGGGGCTGGCTCCGGACGGCTGGGG	540
150	<u>R L L Q S L L V L R R R P C S R D G S G</u>	169
Domain III		
541	CTCCCCACACCTGGGGCTTGGCTCCACACCGAGTTCATCCACGTCGGCTGC	600
170	<u>L P T P G A F A F H T E F I H V P V G C</u>	189
Domain IV		
601	ACCTGCGTGCTGCCCGTTCAAGTGTGACGCCAAGGCCGTGGGCCCTAGACTGGACAC	660
190	<u>T C V L P R S V</u>	197
Domain IV		
661	GTGTGCTCCCCAGAGGGCACCCCTATTTATGTGTATTTATGTTATTTATGCTCCC	720
721	CCAAACACTACCCCTGGGTCTGGCATTCCCGTGTCTGGAGGACAGCCCCCACTGTC	780

Figure 6B
Interleukin-21

781 TCCTCATCTCCAGCCTCAGTAGTTGGGGGTWGAAGGAGCTCAGCACCTCTTCCAGCCCTT 840

841 AAAGCTGCAGAAAAGGTGTCACACGGCTGCCGTACCTTGGYTCCCTGTCCCTGCTCCCGG 900

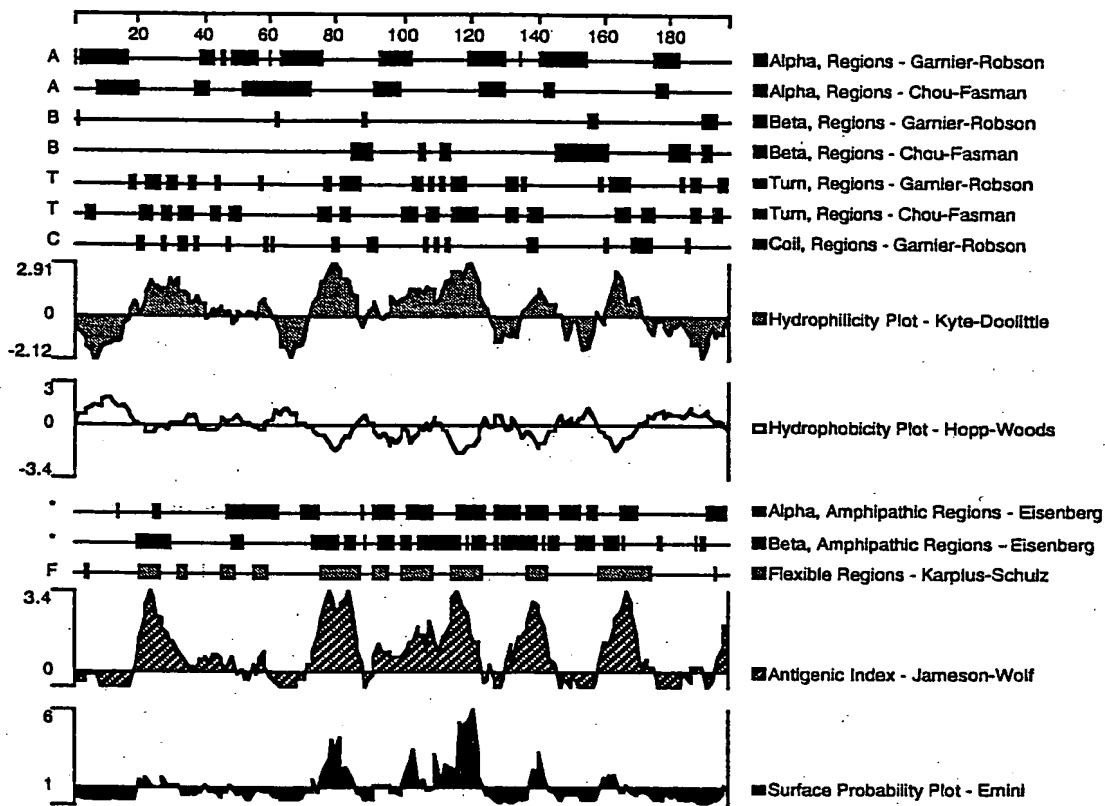
901 CTTCCCTTACCCCTATCACTGGCCTCAGGCCCCCGCAGGCTGCCCTTCCCAACCTCCCTG 960

961 GAAGTACCCCTGTTCTTAAACAATTATTTAAGTGTACGTGTATTATTAACGTGATGAAC 1020

1021 ACAA 1067

09/21/96 120800

Figure 7
Interleukin-21 Polypeptide Analysis



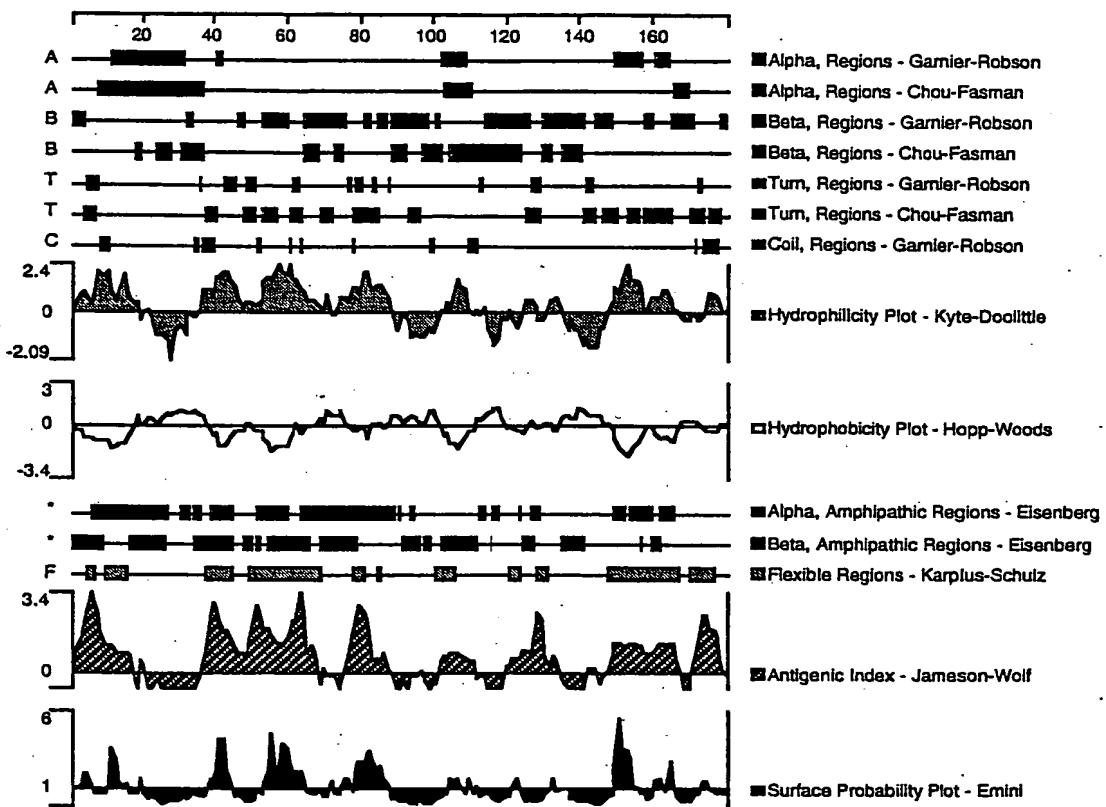
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Figure 8
Interleukin-22

1	GGCTGCGCGGACCGGCGGAGGAGCTACTGGAGCAGCTGTACGGCGCTGGCGCCGGC	60
1	G C A D R P E E L L E Q L Y G R L A A G	20
	CD-VI	
61	GTGCTCAGTGCCTTCCACCACACGCTGCAGCTGGGGCCCGTGAACAGGCGCGCAACGCG	120
21	<u>V L S A F H H T L Q L G P R E Q A R N A</u>	40
	CD-VI	
121	AGCTGCCCGCAGGGGGCAGGCCCGGCCACCGCCGCTCCGGCCGCCACCAACCTGCGC	180
41	<u>S C P A G G R P A D R R F R P P T N L R</u>	60
	CD-VII	
181	AGCGTGTGCCCTGGGCTACAGAACTCTCTACGACCCCCGAGGTACCCAGGTACCTG	240
61	<u>S V S P W A Y R I S Y D P A R Y P R Y L</u>	80
	CD-I	
241	CCTGAAGCCTACTGCCTGTGCCGGGGCTGCCCTGACCGGGCTGGCCGAGGAGCGTG	300
81	<u>P E A Y C L C R G C L T G L F G E E D V</u>	100
	CD-II	
301	CGCTTCCGAGCGCCCTGTCTACATGCCACCGTCGTCCCTGCCGCCACCCCGCTGC	360
101	<u>R F R S A P V Y M P T V V L R R T P A C</u>	120
	CD-III	
361	GCCGGCGGCCGTTCCGTCTACACCGAGGCCTACGTCAACCATCCCCGTGGCTGCACCTGC	420
121	<u>A G G R S V Y T E A Y V T I P V G C T C</u>	140
	CD-IV	
421	GTCCCCGAGCCGGAGAAGGACGCAGACAGCATCAACTCCAGCATCGACAAACAGGGGCC	480
141	<u>V P E P E K D A D S I N S S I D K Q G A</u>	160
	CD-IV	
481	AAGCTCTGCTGGGCCCCAACGACGCGCCCGCTGGCCCTGA	522
161	<u>K L L L G P N D A P A G P</u>	174

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Figure 9
Interleukin-22 Polypeptide Analysis



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